



COPY OF PA
ORIGINALLY FILED
1717

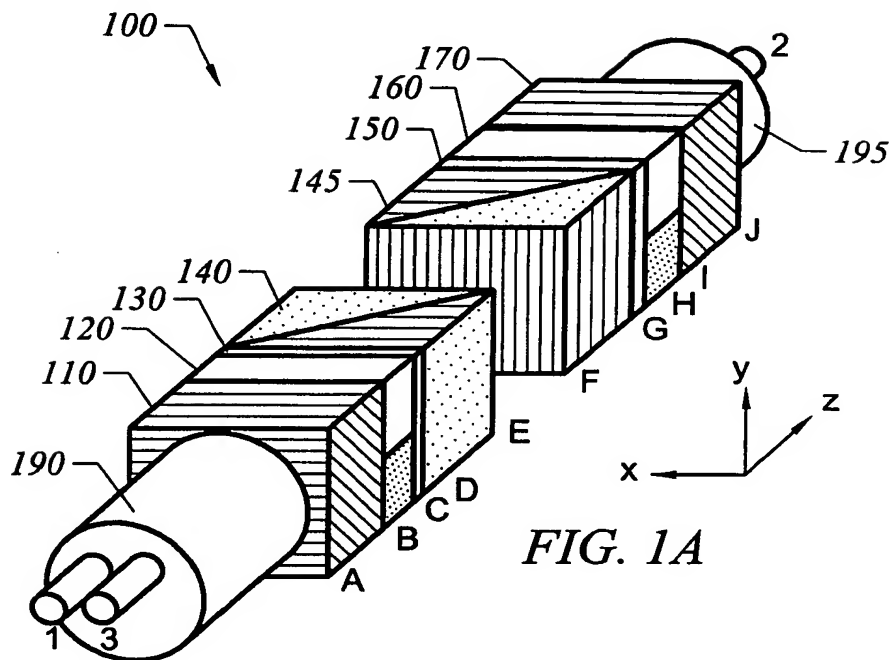


FIG. 1A

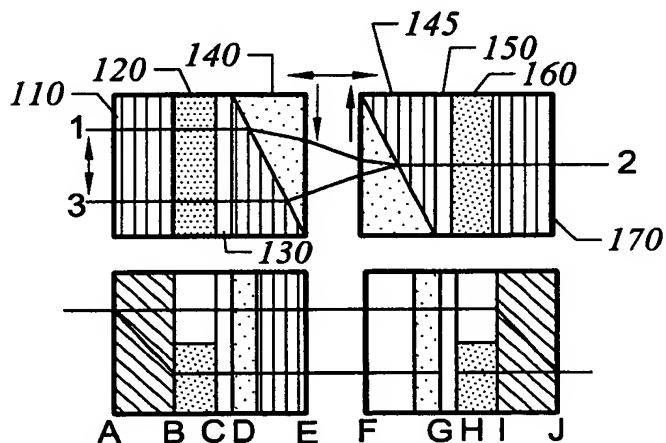


FIG. 1B

FIG. 1C

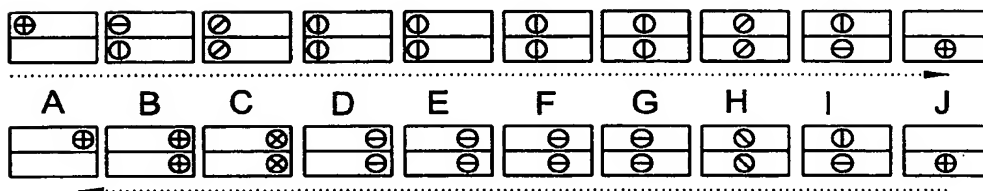
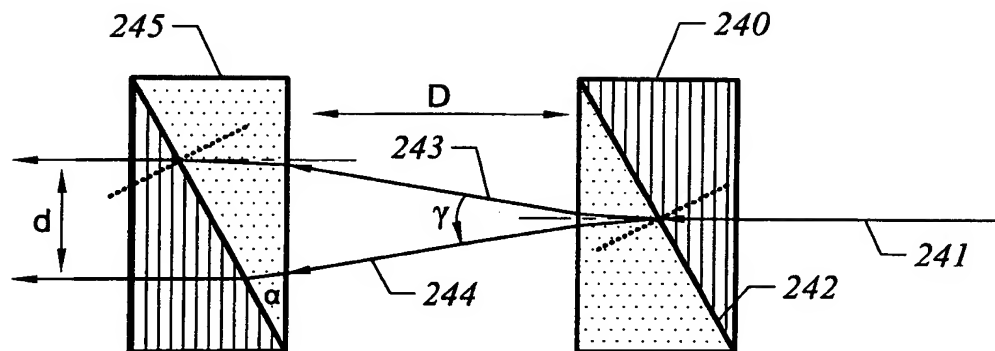


FIG. 1D

10068796-073102



COPY OF PAPER
ORIGINALLY FILED
2/17



$$d \approx 2D \tan (\gamma/2) = 2D \tan \{ \arcsin [(n_o - n_e) \tan (\alpha)] \}$$

Example: $\alpha = 30^\circ$, $\Delta n = 0.2$, $D = 2\text{mm} \rightarrow d = 0.4\text{mm}$
 $4\text{mm} \rightarrow 0.8\text{mm}$

FIG. 2

10063796-073102

20120707 9648900T



COPY OF PAPERS
ORIGINALLY FILED

3/17

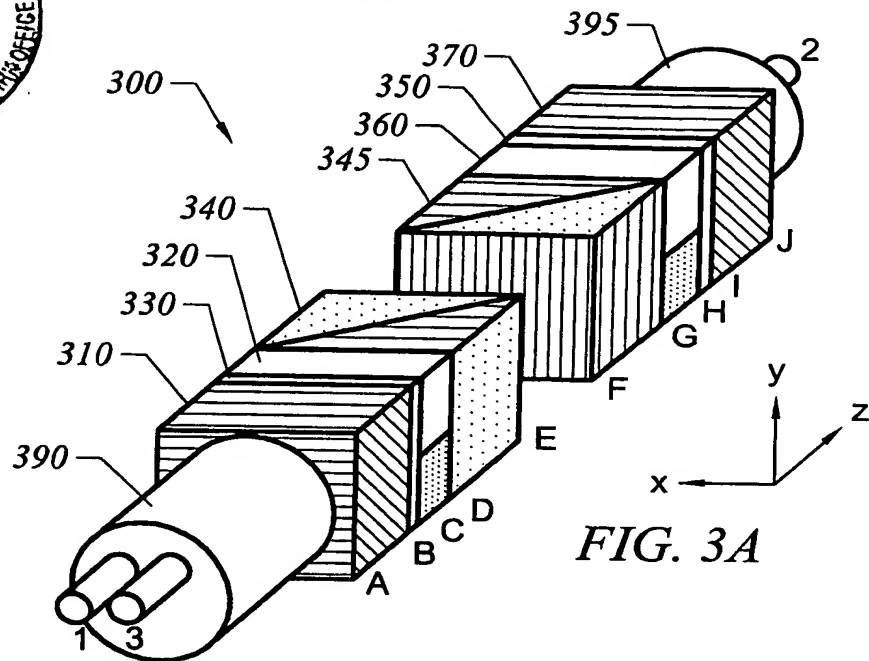


FIG. 3A

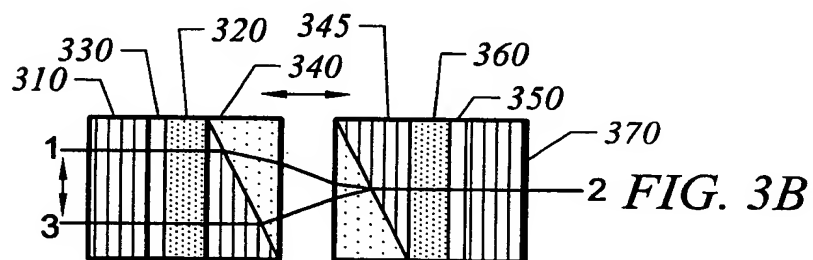


FIG. 3B

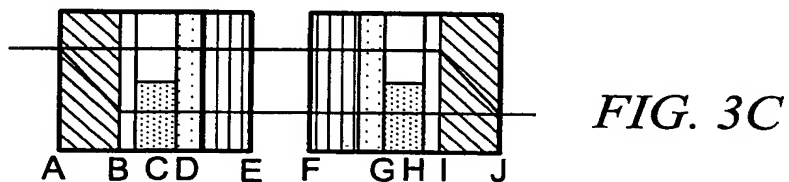


FIG. 3C

⊕	⊖	⊗	⊙	⊕	⊖	⊗	⊙	⊕	⊖
A	B	C	D	E	F	G	H	I	J
⊕	⊖	⊗	⊙	⊕	⊖	⊗	⊙	⊕	⊖

FIG. 3D



4/17

COPY OF PAPERS
ORIGINALLY FILED

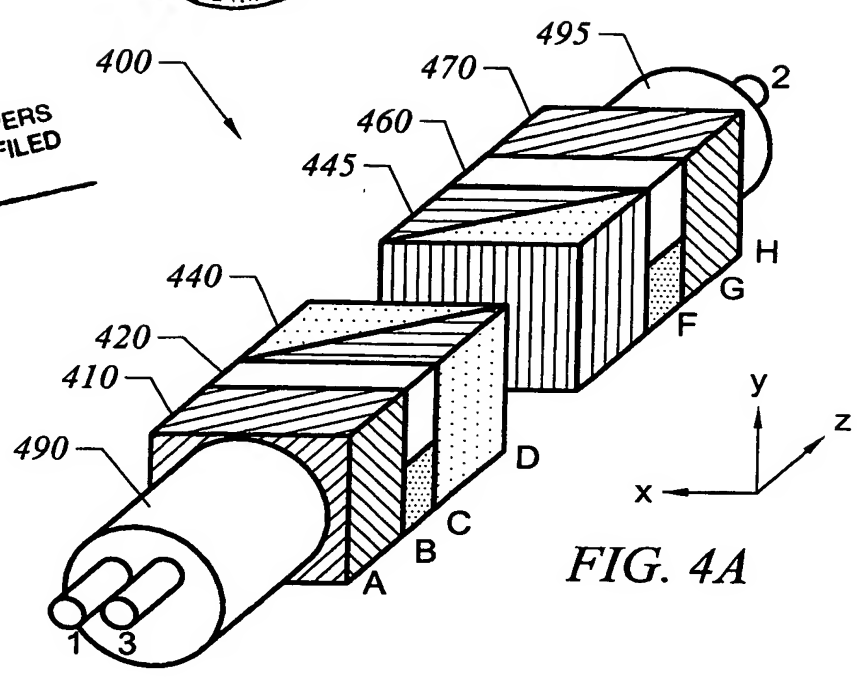


FIG. 4A

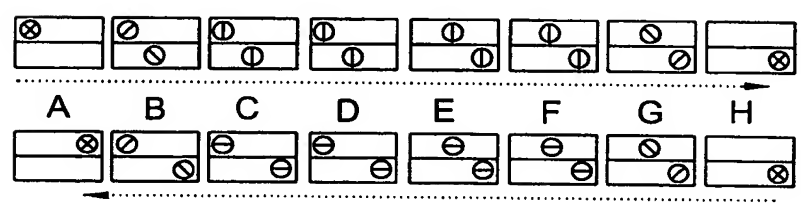
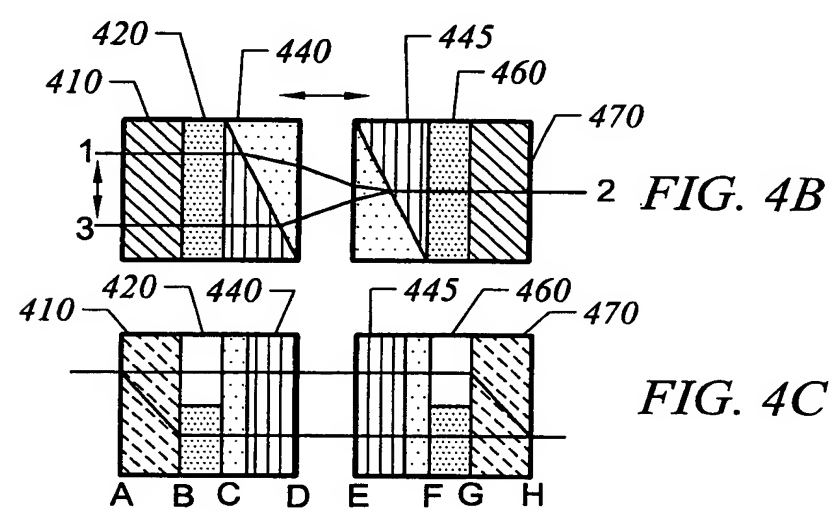
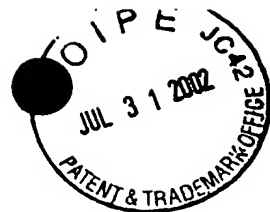


FIG. 4D

2012/09/26 10:06:00



COPY OF PAPERS
ORIGINALLY FILED

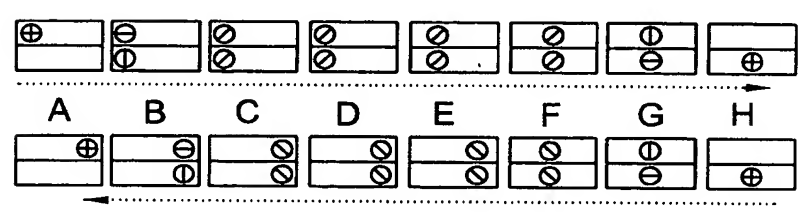
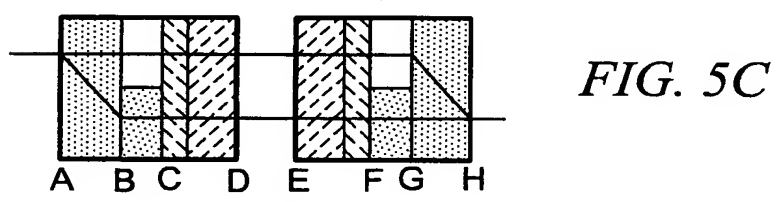
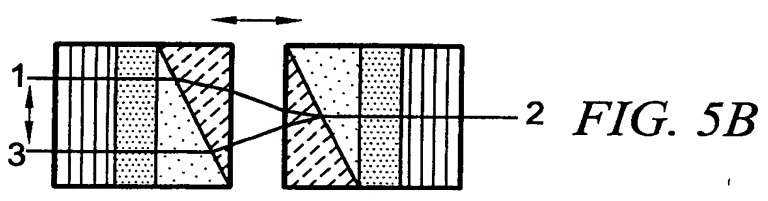
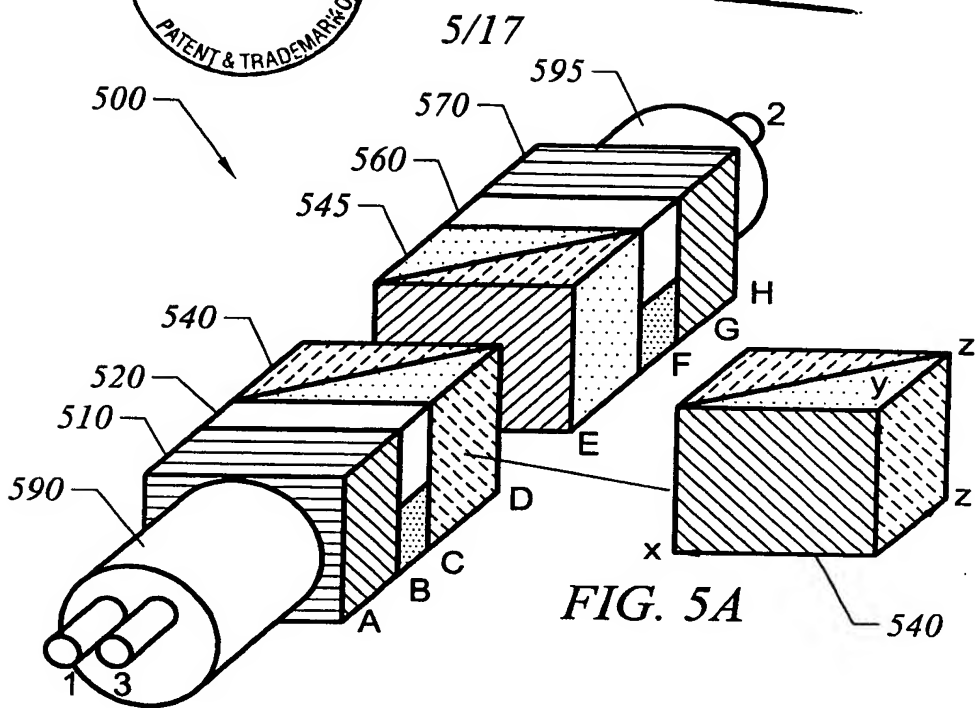


FIG. 5D

20160796-073102

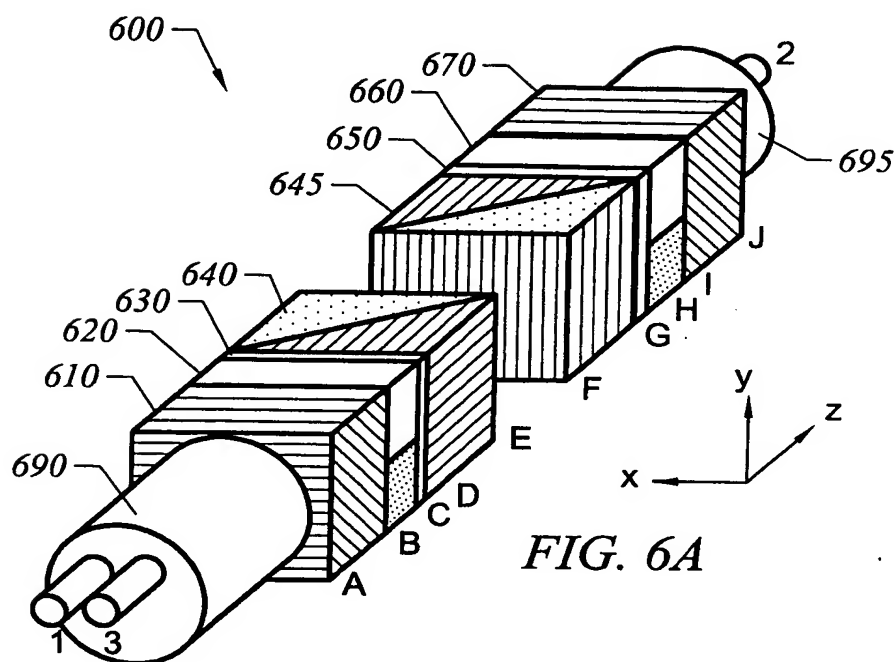


FIG. 6A

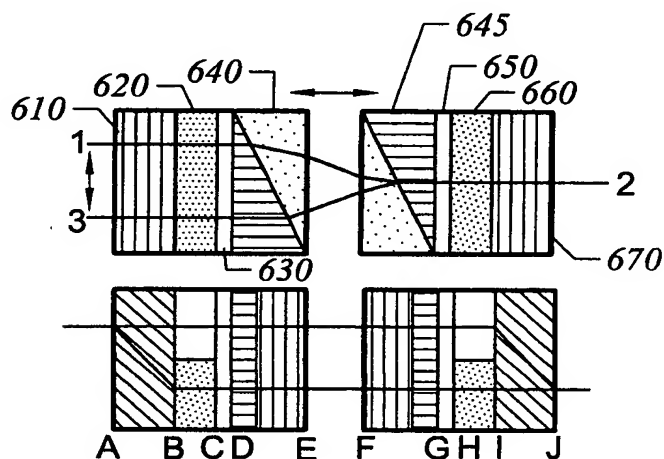


FIG. 6B

FIG. 6C

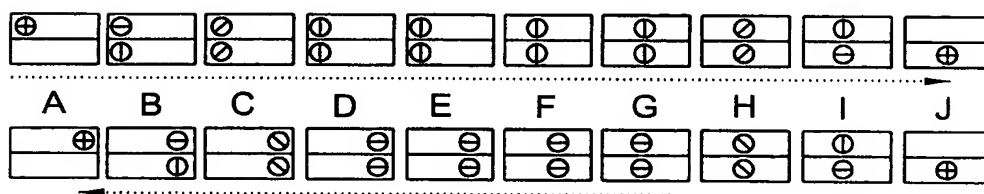


FIG. 6D

20120707 96289001



COPY OF PAPER
ORIGINALLY FILED

7/17

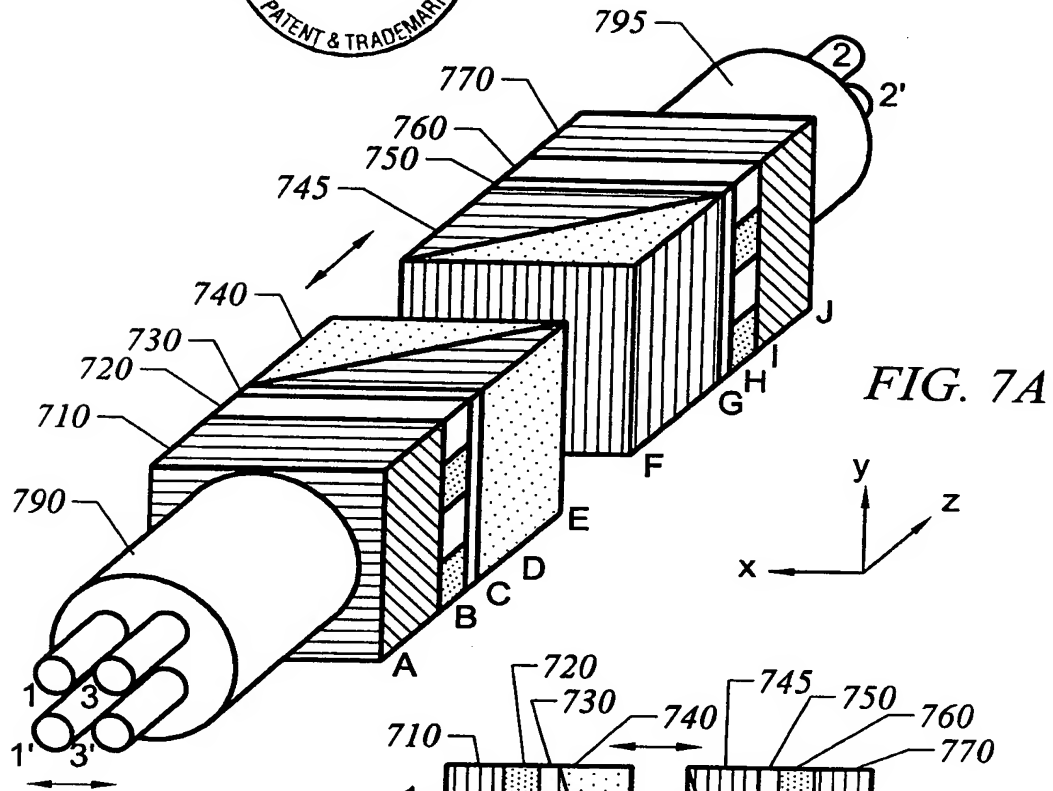


FIG. 7A

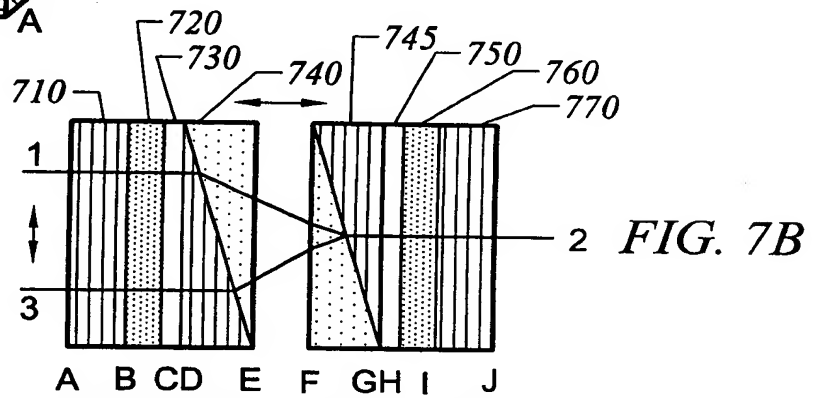


FIG. 7B

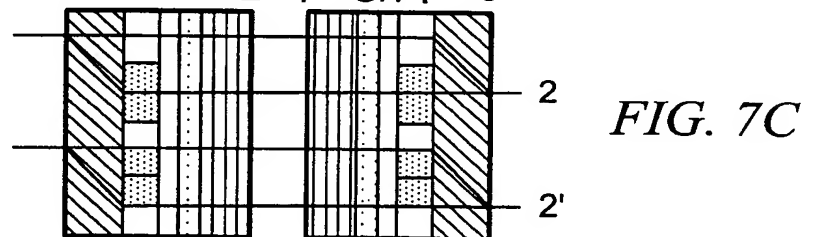


FIG. 7C

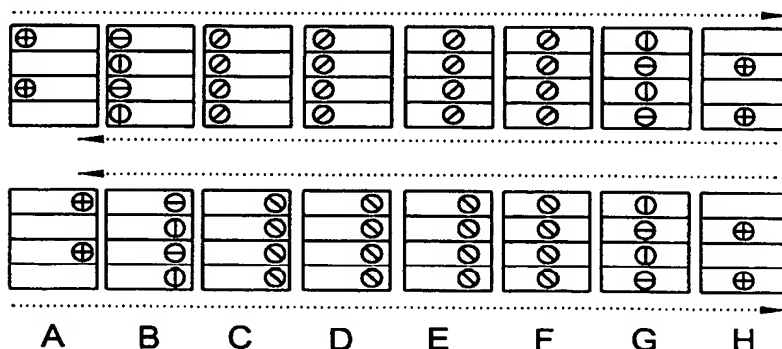
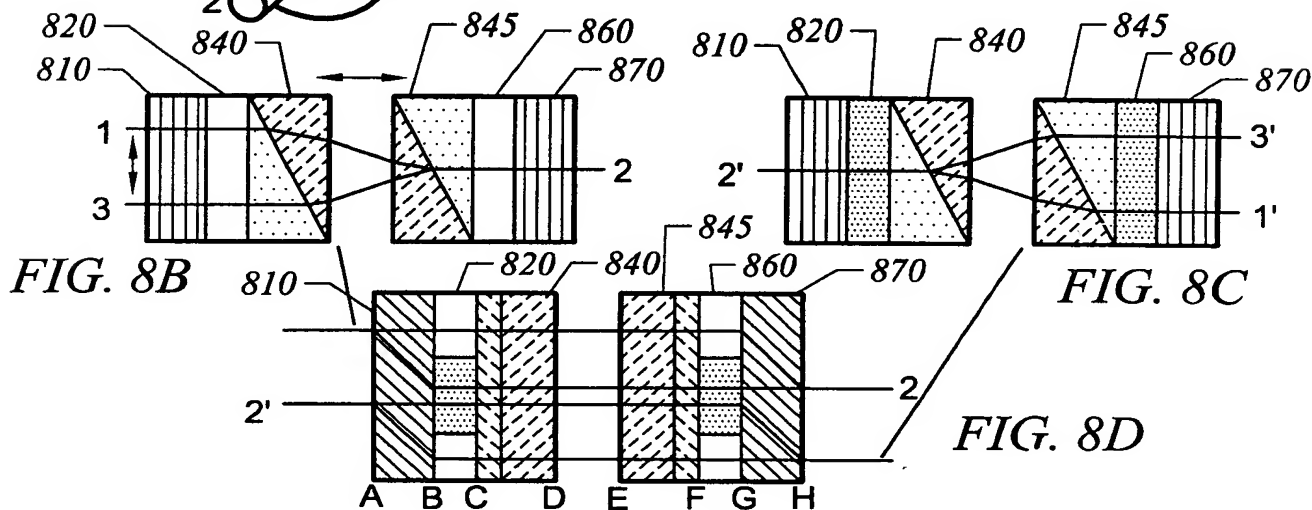
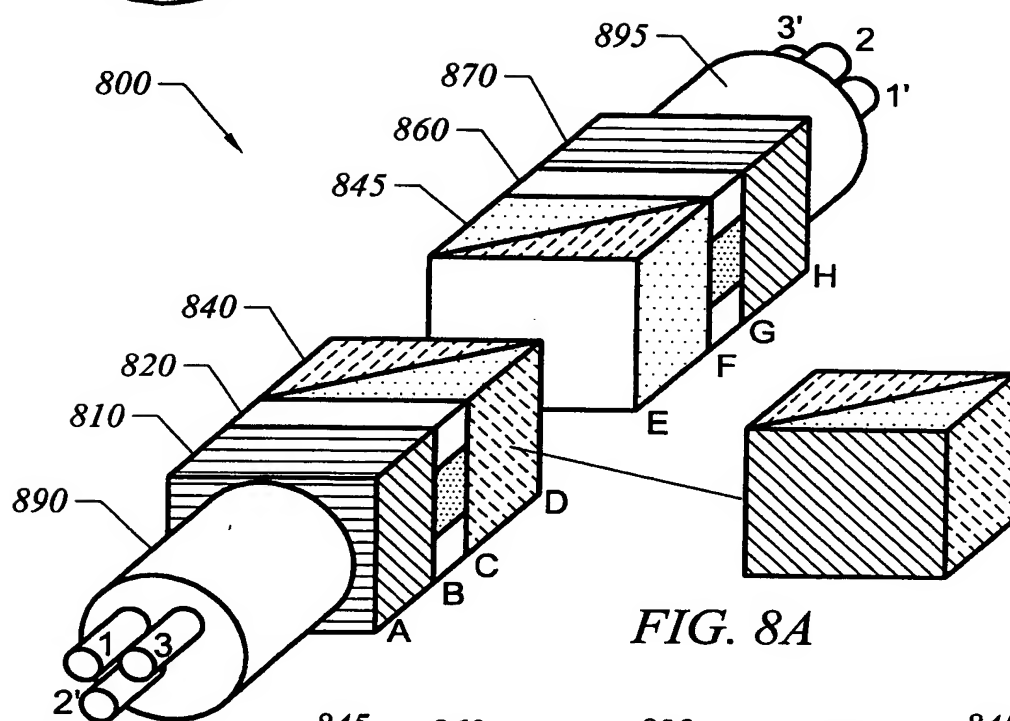
⊕	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊕
⊕	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊕
	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊕
A	B	C	D	E	F	G	H	I	J
⊕	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊕
⊕	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊕
	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊕

FIG. 7D

10068796-072102

**COPY OF PAPER
ORIGINALLY FILED**

FBI LABORATORY





9/17

COPY OF PAPER
ORIGINALLY FILED

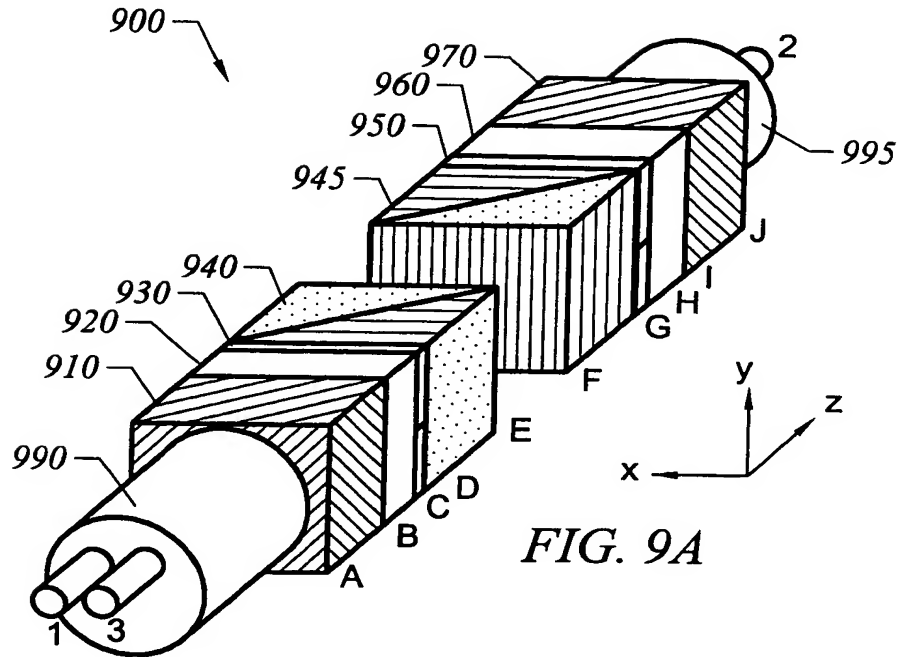


FIG. 9A

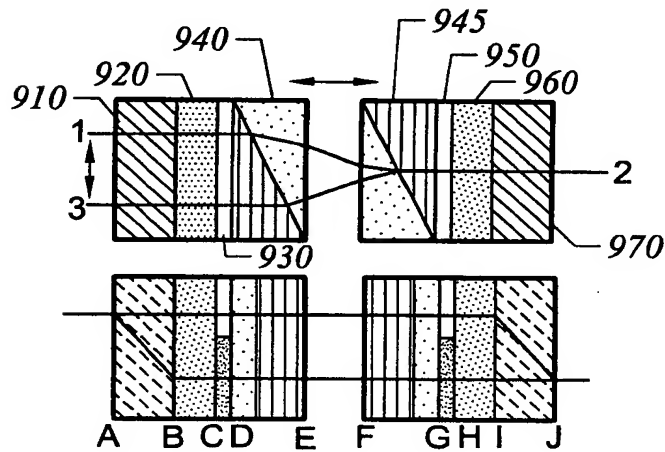


FIG. 9B

FIG. 9C

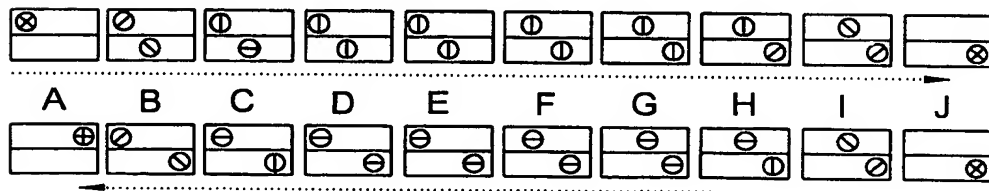


FIG. 9D

10063796-073103



10/17

COPY OF PAPER
ORIGINALLY FILED

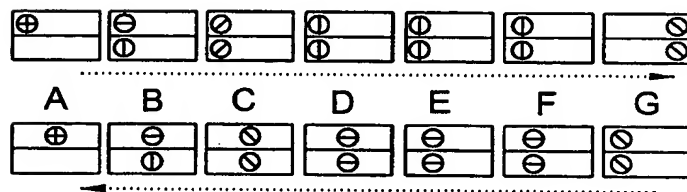
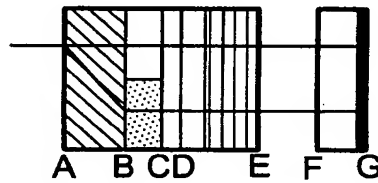
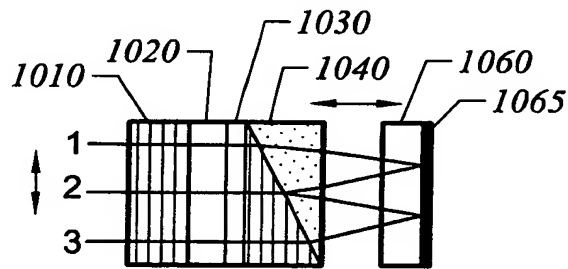
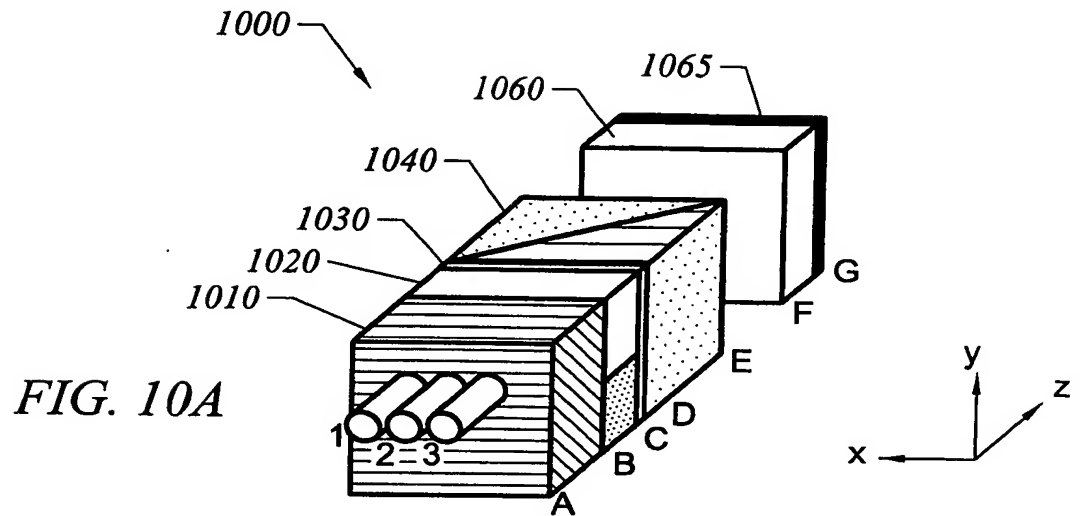


FIG. 10D

2014096.07310



11/17

COPY OF PAPERS
ORIGINALLY FILED

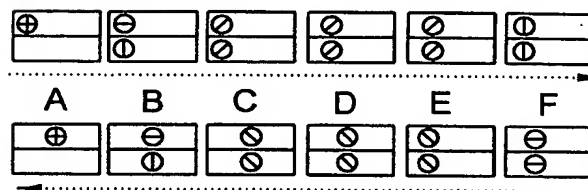
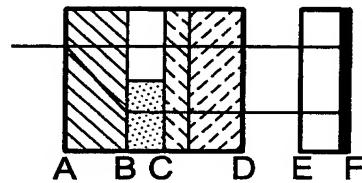
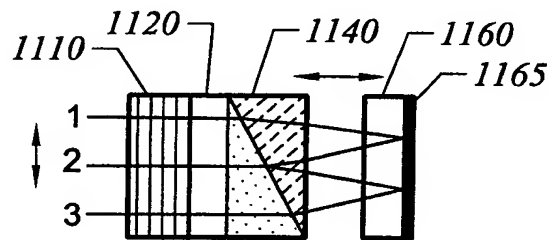
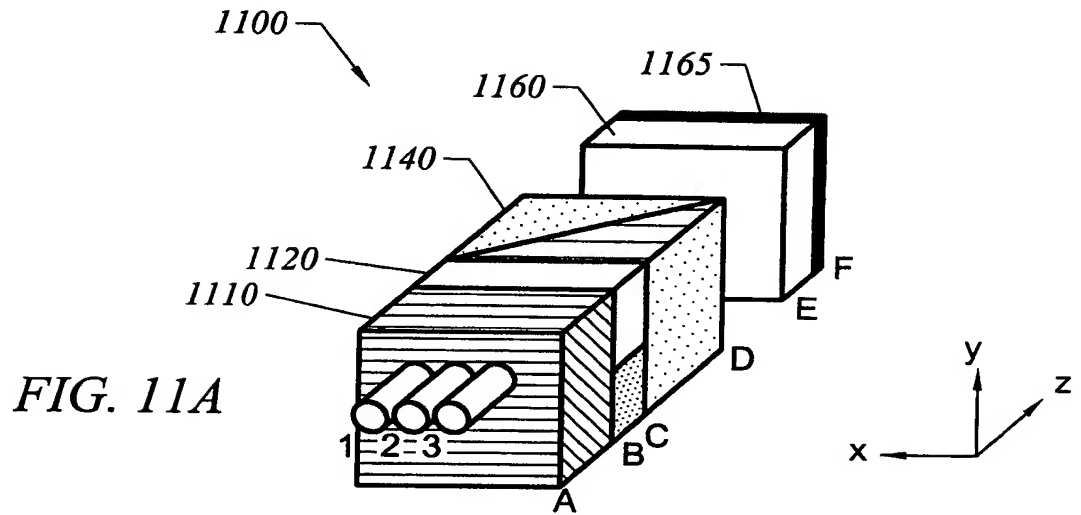


FIG. 11D

10063796-073101



12/17

COPY OF PAPER
ORIGINALLY FILED

Fabrication Process of a Circulator Array

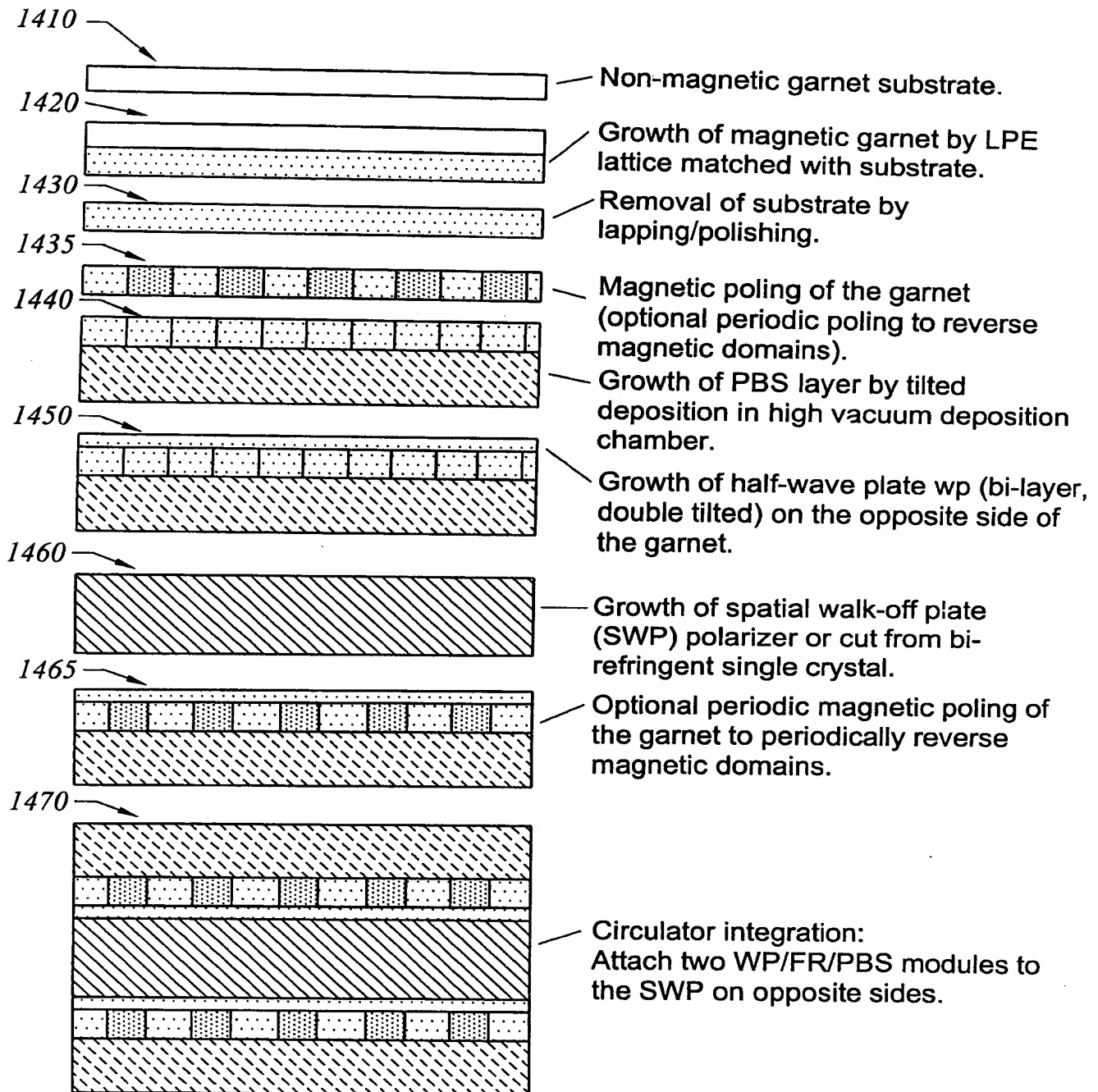
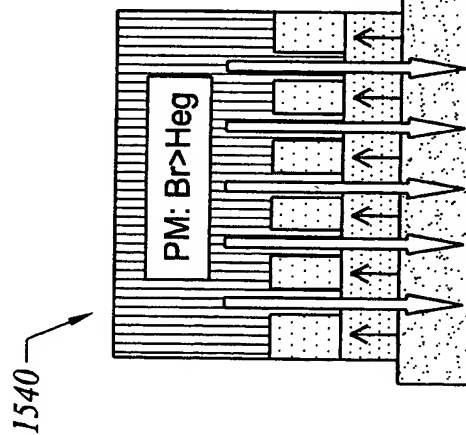


FIG. 12

2016/01/09 14:56:28



FIG. 13A



Cold poling: Only those domains contacting the magnetic tips are magnetically reversed.

FIG. 13D

Initial poling in high field

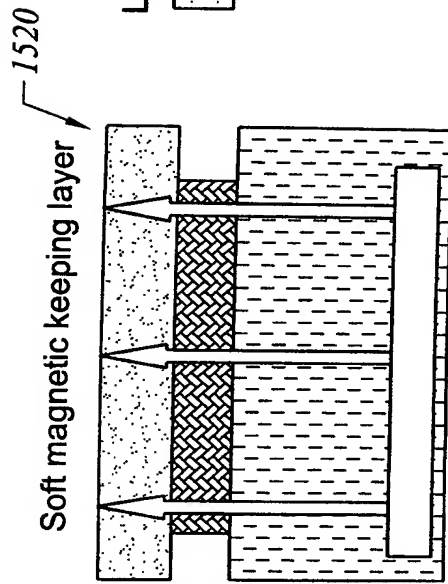


FIG. 13B

Second (periodical) poling



FIG. 13E

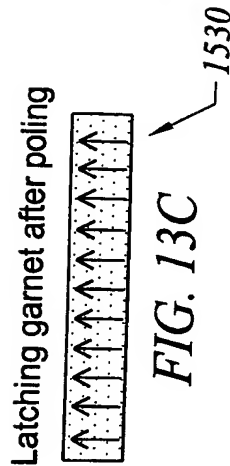
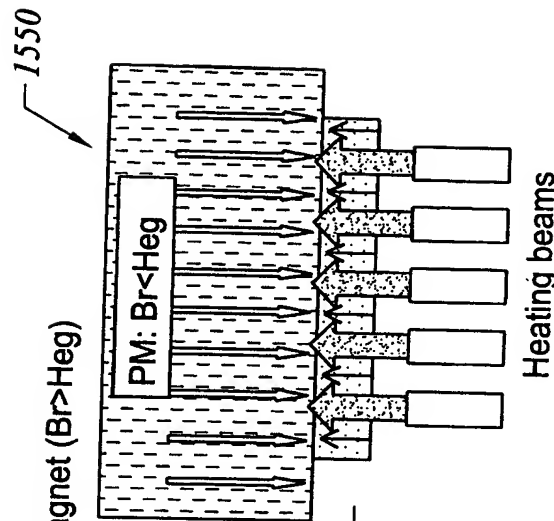


FIG. 13C



Hot poling: Only those domains illuminated by the heating beams are magnetically reversed.

FIG. 13F

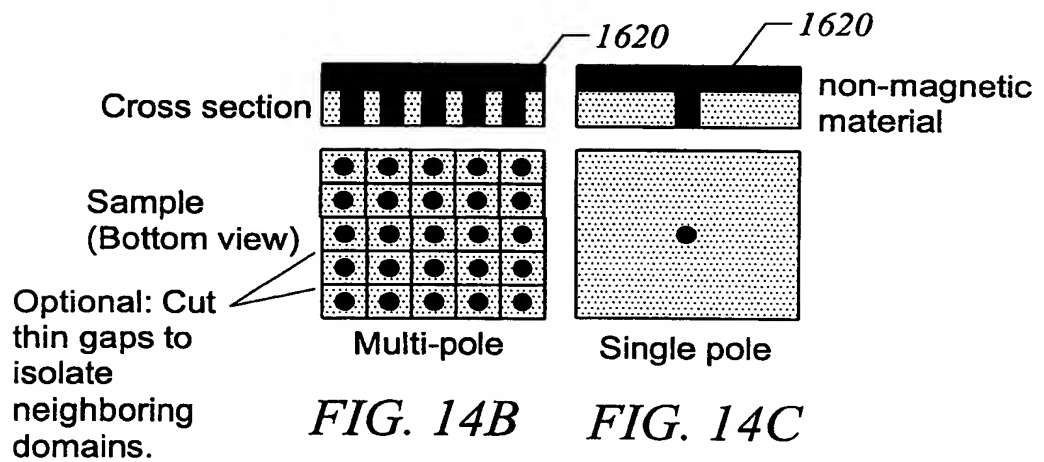
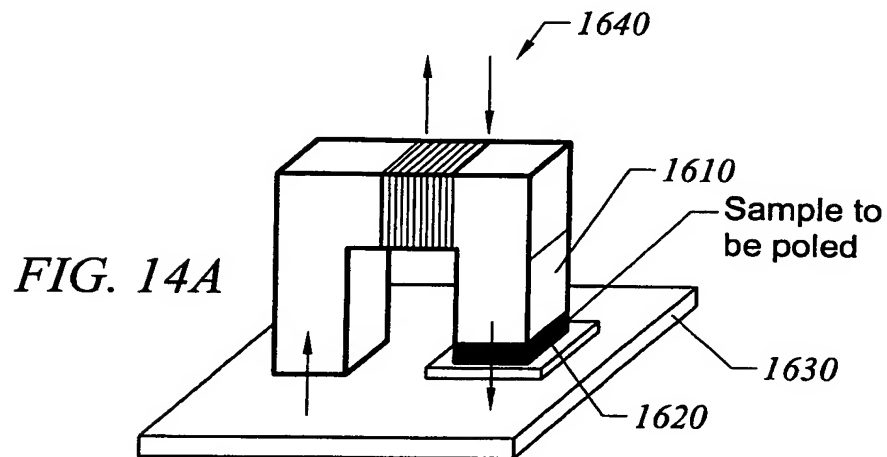




14/17

COPY OF PAPER
ORIGINALLY FILED

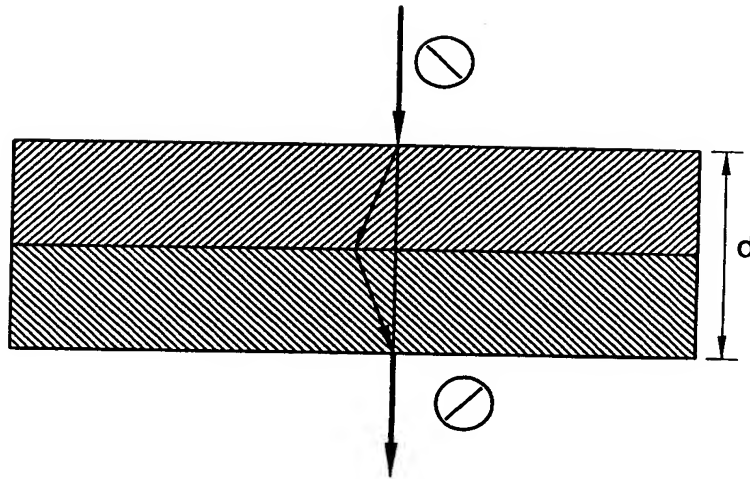
Magnetic (Periodic) Poling of Faraday Rotator





15/17

COPY OF PAPER
ORIGINALLY FILED



Waveplate from bi-directionally obliquely deposited films

Half wave plate : $\Delta n \cdot d = \lambda/2$

The half-wave plate is capable of rotating a linearly polarized light by 2θ (where θ is the direction of polarization with respect to the optical axis before entering the wave plate).

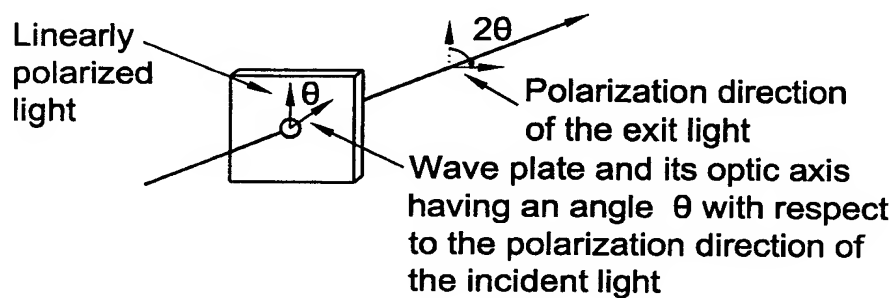


FIG. 15

207E20-9628900T



16/17

COPY OF PAPERS
ORIGINALLY FILED

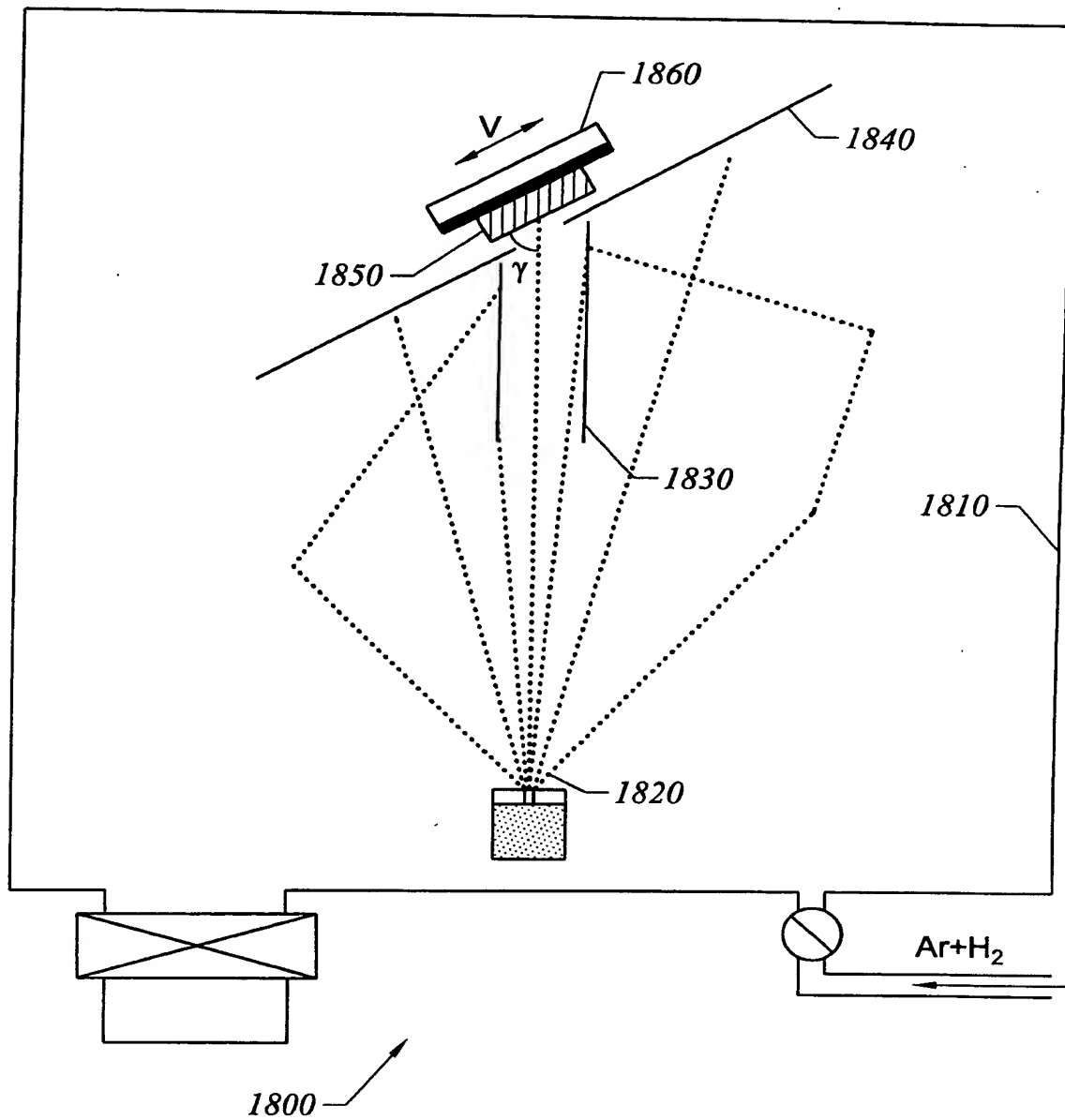


FIG. 16

10068796-073102

Fabrication Process of a Circulator Array

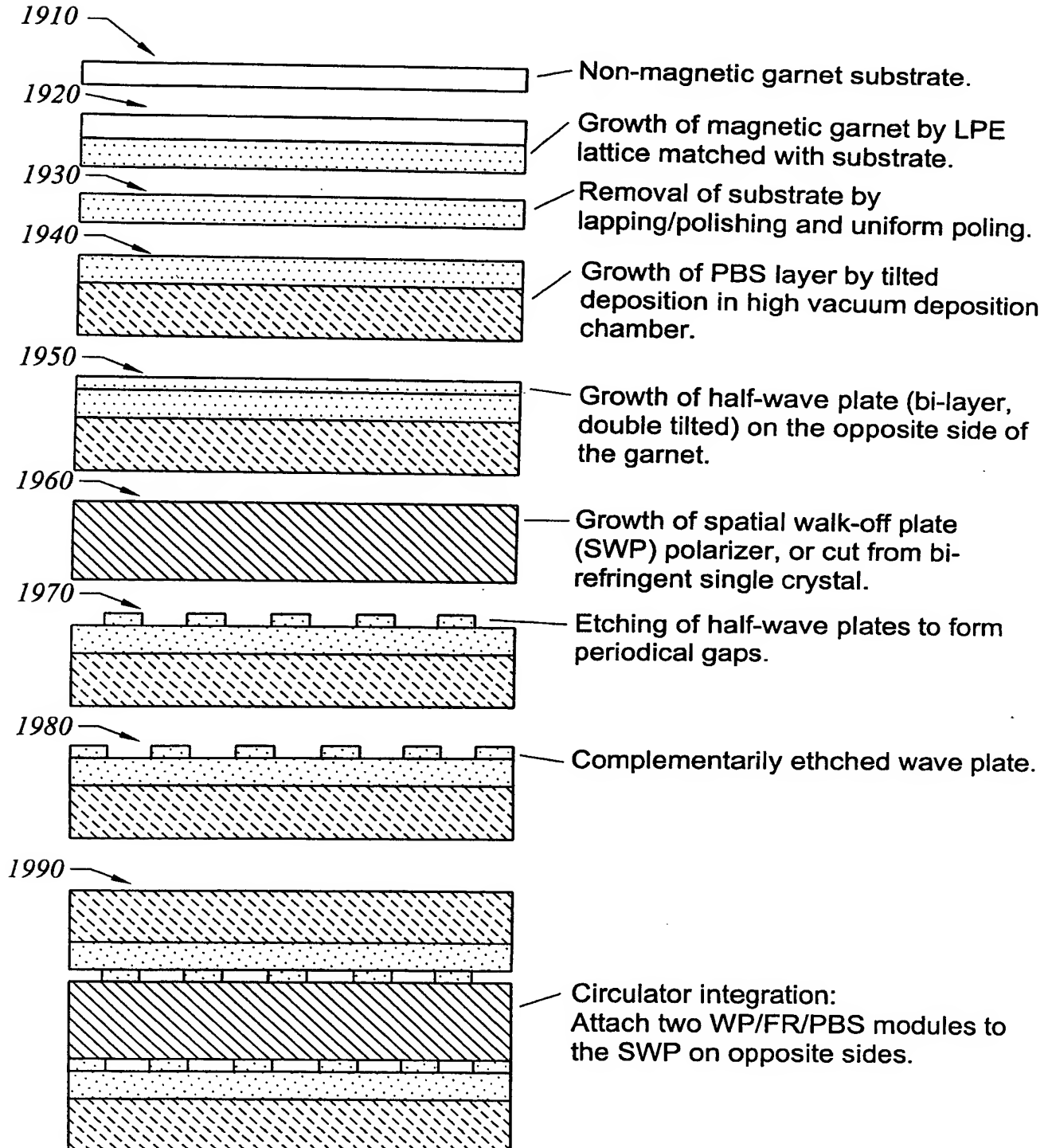


FIG. 17

10068796-073100